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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/007,074	11/08/2001	Feng Wu	MSI-748US	6944

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EXAMINER

SENI, BEHROOZ M

ART UNIT PAPER NUMBER

2613

DATE MAILED: 06/18/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/007,074

Applicant(s)

WU ET AL.

Examiner

Behrooz Senfi

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 November 2001.
2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-42 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☒ Claim(s) 7-9 is/are allowed.
6) ☒ Claim(s) 1,2,4-6 and 10-42 is/are rejected.
7) ☒ Claim(s) 3 is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1, 4 – 6, 10, 14 – 15, 17, 19 – 22, 24 – 28, 30 – 34, 36 – 37 and 39 – 42 are rejected under 35 U.S.C. 103(a) as being unpatentable over Applicant admitted prior art.

Regarding claim 1, the claimed “a method for coding video data according to layered coding techniques” reads on (fig. 1) of Applicant admitted prior, and “encoding to produce a first bit-stream representing a base layer” (applicant prior art fig. 1, base layer), and “encoding macro-blocks to produce a second bit-stream representing one or more enhancement layers using an inter coding mode (applicant prior art fig. 1, enhancement layers, note prediction of middle column of fig. 1 of applicant prior art are inter coded), selected from group consisting of: “an LPLR (predicted from previous low quality) coding mode that encodes macro-blocks to produce the second bit-stream by a prediction from a low quality reference in a previous frame, wherein a high quality reference of the current frame is reconstructed from the low quality in the previous frame” (applicant prior art fig. 1, 24 is predicted from LQ base of previous frame).

Although, fig. 1 of applicant admitted prior art teaches frame not macro-block.

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However, it is clear that the frame consist of macro-block and block, therefore it would have been obvious to one skilled in the art at the time of the invention was made to use macro-block instead of frames.

Regarding claims 10, 15, 17, 19, 22, 25 and 34, the limitations claimed are substantially similar to claim 1, therefore the grounds for rejecting claim1 also applies here. Furthermore, as for the additional limitation "client configured to receive the encoded video data served from the content provider, client being configured to decode the video data" reads on (page 5, section 0010, lines 1 – 3 background of the specification in claims 19 and 25).

Regarding claims 28, 31, 37 and 40, the limitations claimed are substantially similar to claim 1, therefore the grounds for rejecting claim1 also applies here. Furthermore, as for the additional limitation "frames n, and n-1 and n+1" reads on (applicant's prior art figs. 1 – 2, middle column 24 and 44 are considered "n", and 22, 42, are "n-1" and 26, 46 are "n+1", and fig. 2 of the prior art teaches the lowest quality 48 and highest quality 54 and the "n-1" can be the left column and "n+1" can be the right column, and "client configured to receive the encoded video data served from the content provider, the client being configured to decode the video data, in claim 31 " reads on (page 5, section 0010, lines 1 – 3 background of the specification in claims 31 and 40).

Regarding claims 4 – 6, 14, 20 – 21, 26 – 27 and 30, the limitations claimed (transmitting the compressed first and second bit-streams over network" and "decompression of the compressed streams" reads on (page 5, section 0010 background of the specification), and the claimed "reconstructing a missing

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enhancement layer in claims 5, 14, 21, 27” reads on (figs. 1 – 2 of applicant cited prior art), and the claimed “Progressive Fine granularity Scalable (PFGS) coding, in claims 6 and 30” are known and used in the prior art of the record, as evidenced (page 7, section 0016 of Applicant’s background of the invention).

Regarding claims 24, 36 and 39, the limitations claimed are substantially similar to claim 6, therefore, the grounds for rejecting claim 6 also applies here.

Regarding claims 32 – 33 and 41 - 42, the limitations claimed are substantially similar to claims 26 and 27, therefore, the grounds for rejecting claims 26 - 27 also applies here.

3. Claim 2, is rejected under 35 U.S.C. 103(a) as being unpatentable over Applicant admitted prior art (figs. 1 – 2) in view of Lei (US 6,130,911).

Regarding claim 2, the claimed “encoding macro-blocks to produce first and second bit-stream” reads on applicant prior art (i.e. fig. 1). The prior art fails to explicitly teach, “minimizing drifting error”. However, such features are well known and used as evidenced by Lei ‘911(col. 11, lines 23 – 26). Therefore, taking the combined teaching of applicant admitted prior art (i.e. figs. 1 – 2) and Lei ‘911 as a whole, it would have been obvious to one skilled in the art at the time of the invention was made to select INTER coding mode for compressing images and reduce/minimize the error drift to maintain or improve picture quality, as taught by Lei ‘911.

4. Claims 11 - 13, 16, 18, 23, 29, 35 and 38, are rejected under 35 U.S.C. 103(a) as being unpatentable over Applicant admitted prior art (figs. 1 – 2) in view of Suzuki et al (US 6,173,013).

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Regarding claim 11, Applicant admitted prior art fails to explicitly teach the claimed "computer readable medium having executable instruction". Although the limitations as claimed are well known to one skilled in the art, since the video layer (FGS) coding is a process, which is a computer implemented process, therefore the software for carrying out the instruction, which would be executed on a processor, is necessitated by the system. However, examiner cited the secondary reference Suzuki '013 as a support for the same subject matter, please see (col. 47, lines 30 – 35).

Regarding claims 12 - 13, 16, 18, 23, 29, 35 and 38, the limitations claimed are substantially similar to claim 9, therefore the grounds for rejecting claim 9, also applies here.

Allowable Subject Matter

5. Claims 7 – 9 are allowed over the prior art of the record.
6. The following is an examiner's statement of reasons for allowance: the prior art of the record fails to anticipate or rendered obvious the combinations of the elements and steps cited in independent claim 7, for video data layered coding techniques.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Claims 8 – 9 are allowed with respect to independent claim 7.

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7. Claim 3 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Behrooz Senfi** whose telephone number is **(703)305-0132**.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, **Chris Kelley** can be reached on **(703)305-4856**.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

Washington, D.C. 20231

Or faxed to:

(703) 872-9314

Hand-delivered responses should be brought to Crystal Park II, 2121

Crystal

Drive, Arlington, VA, Sixth Floor (Receptionist).

Any inquiry of a general nature or relative to the status of the application or proceeding should be directed to the Technology Center 2600 Customer Service Office whose telephone number is (703) 306-0377.

B. S. B. S.

6/11/2004


CHRIS KELLEY
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600